

AMENDMENTS TO THE CLAIMS

The following listing of the claims replaces all prior claim listings.

LISTING OF CLAIMS:

Claim 1 (Canceled)

Claim 2 (Currently Amended): The method of claim [[1]] 33, wherein the method further comprises further comprising purifying the Dkk protein using preparative and analytical by size-exclusion chromatography.

Claim 3 (Currently Amended): The method of claim [[1]] 33, further comprising treating the culture media with one or more protease inhibitors.

Claim 4 (Currently Amended): The method of claim [[1]] 33, further comprising the step of filtering the culture media prior to purifying the culture media said concentrating.

Claim 5 (Currently Amended): The method of claim [[1]] 33, wherein the detergent is Tween, CHAPS, N-octyl- β -D-glucoside, triton X-100, or Nonidet P40.

Claim 6 (Currently Amended): The method of claim [[1]] 36, wherein the affinity column is a metal affinity column.

Claim 7 (Previously Presented): The method of claim 2, wherein the size exclusion column is a Superose-12 column, a Superdex-200 column, a Sephacryl column, or a Sephadex column.

Claim 8 (Original): The method of claim 6, wherein the metal is nickel, zinc, or iron.

Claim 9 (Previously Presented): The method of claim 5, wherein the Tween is Tween-20 in the amount of about 0.01% to about 1% Tween-20, and EDTA is present in the amount of about 0.01 mM to about 2 mM EDTA.

Claim 10 (Previously Presented): The method of claim 5, wherein Tween-20 is present from about 0.005% to about 0.1%, or N-octyl- β -D-glucoside is present from about 0.05 to about 0.7%; and the EDTA is present in the amount of about 0.5 nM EDTA.

Claim 11 (Previously Presented): The method of claim 5, wherein the N-octyl- β -D-glucoside is present in the amount from about 0.05% to about 0.7%, and EDTA is present in the amount of about 0.5 M.

Claim 12 (Currently Amended): The method of claim 9, further comprising the step of lyophilizing the essentially purified, glycosylated Dkk protein.

Claim 13 (Currently Amended): The method of claim [[1]] 33, wherein the Dkk protein is Dkk1.

Claim 14 (Original): The method of claim 13, wherein the Dkk1 protein is human Dkk1.

Claim 15 (Currently Amended): The method of claim 3, wherein the said treating step is additionally performed in the presence of a salt and imidazole.

Claim 16 (Previously Presented): The method of claim 15, wherein the salt is NaCl, LiCl, or KC1, and wherein the salt is in a final concentration of about 100 mM to about 1 M, and the imidazole is present in a final concentration of about 0.5 mM to about 50 mM.

Claim 17 (Original): The method of claim 15, wherein the salt is NaCl and is present at a final concentration of about 500 mM, and the imidazole is present at a final concentration of about 5 mM.

Claim 18 (Currently Amended): The method of claim [[1]] 6, wherein the metal affinity column is eluted with gradient is an imidazole gradient of about 5 to about 1,500 mM imidazole ~~in a metal column~~, and wherein the Dkk protein is tagged with histidine.

Claim 19 (Currently Amended): The method of claim 18, wherein the imidazole gradient is about a 20 mM to about a 1,000 mM imidazole ~~gradient~~.

Claim 20 (Currently Amended): The method of claim 18, wherein the Dkk protein is human Dkk1, and the metal affinity column is a nickel affinity column.

Claim 21 (Currently Amended): The method of claim [[1]] 33, wherein the mammalian cell line is HEK293T cells or HEK293 EPNA cells host cell is a HEK293T or HEK293 EPNA cell.

Claims 22-32 (Canceled)

Claim 33 (New): A method of concentrating an active, glycosylated Dkk protein, comprising:

concentrating a culture media containing an active, glycosylated Dkk protein in the presence of EDTA and a detergent to obtain a concentrated Dkk protein, wherein the detergent does not inhibit the activity of the Dkk protein, and wherein a mammalian host cell expresses the Dkk protein and secretes the Dkk protein into the culture media.

Claim 34 (New): The method of claim 33, wherein the yield of Dkk protein from the culture media is at least about 80%.

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Claim 35 (New): The method of claim 33, wherein the concentration of the active, glycosylated Dkk protein is at least about 2 mg/mL.

Claim 36 (New): The method of claim 33, further comprising purifying the culture media across an affinity column prior to said concentrating.